

Australian Standard[®]

**Information technology—
Telecommunications and
information exchange between
systems—OSI Routing Framework**

This Australian Standard was prepared by Committee IT/1, Information Systems—Interconnection. It was approved on behalf of the Council of Standards Australia on 1 July 1991 and published on 9 August 1991.

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PREFACE

This Standard was prepared by the Standards Australia Committee on Information Systems—Interconnection. It is identical with and has been reproduced from ISO/IEC/TR 9575:1990, *Information technology—Telecommunications and information exchange between systems—OSI Routeing Framework*.

The Standard is one of a series of Open Systems Interconnection (OSI) Standards which are currently under development. Since OSI Standards are developmental, there may be some minor difficulties encountered in their implementation. For this reason, Standards Australia will be providing, through the OSI Help Desk, a service to coordinate and disseminate information concerning difficulties which are identified in using this Standard.

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- (i) *Terminology* The words ‘Australian Standard’ should replace the words ‘International Standard’ wherever they appear.
- (ii) *References* The references to International Standards should be replaced by references to Australian Standards as follows:

<i>Reference to International Standard</i>	<i>Australian Standard</i>
ISO 7498 Information processing systems—Open Systems Interconnection—Basic Reference Model	AS 2777 Information processing systems—Open Systems Interconnection—Basic reference model
Add.1 Connectionless-mode Transmission	Suppl1 Connectionless-mode transmission
Add.3 Naming, including Addressing	Suppl3 Naming and addressing
Add.4 Management Framework	Suppl4 Management framework
8348 Information processing systems—Data communications—Network Service Definition	2994 Information processing systems—Data communications—Network service definition (includes Add. 1)
Add.1 Connectionless-mode transmission	2994
Add.2 Network layer addressing	Suppl1 Network layer addressing
8473 Information processing systems—Data communications—Protocol for providing the connectionless-mode network service	—
8648 Information processing systems—Open Systems Interconnection—Internal organisation of the Network Layer	3622 Information processing systems—Open Systems Interconnection—Internal organization of the network layer
9542 Information processing systems—Telecommunications and information exchange between systems—End system to Intermediate system Routeing exchange protocol for use in conjunction with the protocol for providing the connectionless-mode network service	—

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Information technology—Telecommunications and information exchange between systems—OSI Routing Framework

1 Scope

This Technical Report provides a framework in which OSI protocols for routing may be developed and to expedite the progression of routing protocols through the standardisation process.

2 Normative References

The following standards contain provisions which, through reference in this text, constitute provisions of this Technical Report. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this Technical Report are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 7498:1984, *Information processing systems—Open Systems Interconnection—Basic Reference Model*.

ISO 7498/Add.1:1984, *Information processing systems—Open Systems Interconnection—Basic Reference Model—Addendum 1: Connectionless-mode Transmission*.

ISO 7498/Add.3:1989, *Information processing systems—Open Systems Interconnection—Basic Reference Model—Addendum 3: Naming, including Addressing*

ISO 7498/Add.4:1989, *Information processing systems—Open Systems Interconnection—Basic Reference Model—Addendum 4: Management Framework*.

ISO 8348:1987, *Information processing systems—Data communications—Network Service Definition*.

ISO 8348/Add.1:1987, *Information processing systems—Data communications—Network Service Definition—Addendum 1: Connectionless-mode transmission*.

ISO 8348/Add.2:1988, *Information processing systems—Data communications—Network Service Definition—Addendum 2: Network layer addressing*.

ISO 8473:1988, *Information processing systems—Data communications—Protocol for providing the connectionless-mode network service*.

ISO 8648:1988, *Information processing systems—Open Systems Interconnection—Internal organisation of the Network Layer*.

ISO 9542:1988, *Information processing systems—Telecommunications and information exchange between systems—End system to Intermediate system Routing exchange protocol for use in conjunction with the protocol for providing the connectionless-mode network service (ISO 8473)*.

3 Definitions

3.1 Reference Model definitions

This Technical Report makes use of the following terms defined in ISO 7498:

- a) Network Layer
- b) Network Service access point
- c) Network Service access point address
- d) Network entity
- e) Routing
- f) Network protocol
- g) Network relay
- h) Network protocol data unit
- i) System management
- j) Layer management

3.2 Network Layer architecture definitions

This Technical Report makes use of the following terms defined in ISO 8648:

- a) Subnetwork
- b) End system
- c) Intermediate system
- d) Subnetwork service